

Occasional Papers on Mollusks

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Published by
THE DEPARTMENT OF MOLLUSKS
Museum of Comparative Zoölogy, Harvard University
Cambridge, Massachusetts

HARVARD
UNIVERSITY

VOLUME 6

11 March 2002

NUMBER 80

ARTHUR FAIRFIELD GRAY (1855-1944), HIS MALACOLOGICAL CONTRIBUTIONS

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Abstract: Arthur Fairfield Gray (1855-1944): his life is briefly sketched and his malacological contributions are listed. The lectotype of the one species he described, *Unio borealis* Gray, 1882, previously selected, is figured.

Arthur Fairfield Gray was born in 1855 at Beverly, Massachusetts, the son of Samuel F. and Abigail (Whitehouse) Foster Gray. It is reported in the very important sounding *Representative Citizens of the Commonwealth of Massachusetts* (Hurd: 1902: 734-736) that it was impossible to identify Gray's immigrant progenitor in direct line or to trace his parental ancestry farther back than his great-grandfather, James Gray, of Beverly and Harrison, Maine who was a cordwainer.

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Despite this lamentable limitation, there follow several pages of genealogy which indicate that Gray's people were all early settlers in New England and active in both the French and Indian Wars and the American Revolution.

From 1861 to 1872, Gray was educated in the schools of Danvers, Massachusetts, and received no higher education. He early became interested in natural history, and having an artistic temperament, turned his attention to supplying illustrations for scientific works. Early in 1872, at the age of 17, Gray entered the office of Shedd and Sawyer, a firm of civil engineers who built water works, sewerage plants, and mill buildings. During the ten years Gray was with Shedd & Sawyer, he gained a thorough knowledge of construction methods and engineering. When he was 27 his first article on mollusks was published. It was a letter to Charles Darwin, on the transportation of a fresh-water mussel on a duck's foot, which Darwin submitted to *Nature*. It was later reprinted by Kew (1893:80). In 1882, Gray planned and supervised the building of a large manufacturing plant near Cincinnati, Ohio. While there he also found time to publish a definitive bibliography of all the papers dealing with the molluscan fauna of Ohio through 1881 for the Cincinnati Society of Natural History (CSNH). He had become engaged in the study of mollusks at CSNS and made the acquaintance of A. G. Wetherby, with whom he had corresponded extensively between 1877-1879 whilst living at Danversport.

In 1884, Gray married Mabel Stone, a native of Hamburg, Illinois, born in 1863. The Grays had three children: Warren, born in 1885 who died in infancy; Arthur Harrison, born in 1888; and Helen, born in 1894. Mrs. Gray was said to have come from a long and honorable line of New England ancestry on both the paternal and maternal side. Through her mother she was a descendent of John Alden and Priscilla Mullins of the Plymouth Plantation,

made famous by Henry Wadsworth Longfellow in his poem, "The Courtship of Miles Standish." This connection once established it would be anticlimactic to continue here with another page of who begat whom as did Hurd, who may well have been more impressed with the Gray genealogy than with the Grays themselves.

From 1882-1884, Gray lived in Danversport, Massachusetts, where he was the superintendent and manager of a large industrial plant. In 1884, the newlywed Grays moved to Lawrence, Massachusetts where he took charge of transforming the Arlington Mills of that city by supervising the erection of many mills for that fast growing textile manufacturer. A large number of surviving postcards, addressed both to Danversport and Lawrence, indicate that Gray was also busy preparing drawings of land snails for Thomas Bland (1809-1883) and William Greene Binney (1833-1909), though he had been making illustrations of shells for publication at least since 1878, as acknowledged by Calkins (1878:235) of the Chicago Academy of Sciences, who dealt in "Lumber, Lath, and Shingles, Etc., by the Cargo."

In 1890, Gray established his own architectural and engineering firm in the Exchange Building on State Street in Boston, Massachusetts, which he maintained until 1933. Subsequently, he ran the firm from his home at 22 Fayette Street, Watertown, Massachusetts. In addition to being a capable and artistic designer of mill structures, Gray built railway stations for the Boston and Maine Railroad at Malden and Newburyport, Massachusetts, and bank buildings at Peabody, Hyde Park, and Salem, Massachusetts, as well as pumping stations for sewerage plants at East Boston and Deer Island. Fifty-three sets of drawings of public buildings produced with his partner, Frank M. Blaisdell, are held in the Special Collections Department in the Frances Loeb Library at Harvard University.

From 1888, over forty years would go by before Gray would again contribute to molluscan literature with a biography of W. G. Binney. He was, however, active in the Boston Malacological Club, founded in 1910 by five gentlemen, at the home of Francis N. Balch in Jamaica Plain. Elected were President Edward Sylvester Morse (1838-1925; Champion, 1947); Vice-President Francis Noyes Balch (1874-1960; Champion, 1961); Secretary Treasurer, Rev. Henry W. Winkley (1858-1918; Johnson, 1918); Executive Committee, Charles Willison Johnson (1863-1932; Gray, 1933) and John Ritchie, Jr. (1851-1939; Anonymous, 1939.) When the Club held its first meeting on March 10, 1910, thirteen members were present, and while it is not now known if Gray was among them, during the first fifty years of the club's existence (it persists to this day) Gray was an active member and President between 1923-1927. No one else had served so long in that position.

William J. Clench (1897-1984; Abbott, 1984) was appointed Curator of Mollusks, Department of Mollusks, at the Museum of Comparative Zoology (MCZ) in 1926 and began a correspondence with Gray, which would continue almost to the death of the latter, regarding the disposal of his collection and library both of which he wished to go to the MCZ. In September, 1927, Gray mentioned a trip to Bermuda with Dr. Mark (Edward Laurens Mark, 1847-1946) who, in addition to being a distinguished Harvard professor and author of a definitive work on *Limax* (1881), was then the Director of the Bermuda Biological Station. Gray suggested that he wanted examples of the shells he collected in Bermuda to be in the Museum. On January 9, 1934, Gray wrote to Clench, referring to his collection and library, that since he was celebrating his 79th birthday, he thought, "it was time to place these things." Gray presented his Bermuda collection to the MCZ in 1934, but it was not until 1938 that he gave to the Museum some 500

lots of North American land shells he had received mostly from Binney and Bland. These were duplicates from both collections. The MCZ bought the main Bland collection in 1868 (Clench, 1933: 80). The Binney collection is in both the National Museum of Natural History and the American Museum of Natural History (Gratacap, 1901). The Department of Mollusks also received Gray's extensive collection of photographs of early conchologists but, alas, it did not include one of himself. He also gave several of the original copper plates used to produce the illustrations in works by both Thomas Say and William G. Binney. A number of letters to Gray from W. G. Binney, Thomas Bland, A.G. Wetherby, and others are preserved in the special collections of the library of the MCZ.

Gray continued to offer his library for sale, but the Director Dr. Thomas Barbour (1884-1946; Peters, 1948), who had spent much of his own fortune on modernizing the MCZ, did not make the funds available, and Curator Clench could not afford to purchase it himself. Gray had been a subscriber to a deluxe set of the land snail portion of Tryon's *Manual of Conchology* from its beginning (1885) and volume 28, the final volume, still had a couple of numbers to go before completion (1935). He had purchased a number of items from the library of W. B. Binney, which included Thomas Say's *American Conchology* (1830-1834 [-38]) a smoke-damaged copy from his father, Amos Binney (1803-1847; Dall, 1888:122) which had been used by the younger Binney when he was preparing a reprint of Say's complete works. There was also Thomas Bland's copy of Say's original work, and a slightly smoke damaged copy of S. S. Haldeman's *Monograph* (1840-1845).

The proposed sale of books to the Museum of Comparative Zoology never took place. Instead, in 1942, the entire Gray library was sold to George Goodspeed, then a well known Boston book dealer, who paid 35 cents a

volume for the library, which also contained Gray's engineering books. Those of us from the Museum were among the first to see the books, but one copy of Thomas Say's *Conchology* had already been sold to a communist group for \$200 because of its association with Robert Owen's communist experiment at New Harmony, Indiana. The other copy was never mentioned. The *Manual of Conchology* had also disappeared, but many of the remaining books were purchased for the Department of Mollusks by Richard Winslow Foster (1920-1964; Turner, 1970) including the Haldeman (1840-1845); Conrad, *American Marine Conchology* (1841-[34]); B. Delessert's great folio illustrating J.P.B. Lamarck's types (1841); many rare works of J. R. Bourguignat (1829-1892); Servain, 1891); and others.

This author (Johnson, 1975) bought one of the great rarities, in a book of bound separates: Say's article on conchology from the 1817 edition of Nicholson's Encyclopedia. This is the first article on American Conchology and possibly the only known separate of it. Say had sent the article to C. S. Rafinesque (1783-1840; Boewe, 1982) which had then been bought by S. S. Haldeman (1812-1880; Dall, 1888), W. G. Binney, and finally A. F. Gray.

Gray died two years after the sale in 1944 from the effects of Parkinson's disease, at Watertown, Massachusetts where he had resided for fifty years. He had been a Town Meeting Member, School Committeeman, Parks Commissioner, Library Trustee, author of a Report on Laying out of Ridgelawn Cemetery (1899), and also had had time to become a Knights Templar in the Masonic Order. Mrs. Gray died previously in 1931. The Gray house still stands, at 20 Fayette Street, but in poor condition in what is now an ethnic neighborhood, secluded, but near what has become a busy intersection.

Acknowledgments

Most of the data on the life of Arthur Fairfield Gray was gleaned from a researcher's report by Trevor Joy Johnson, former Archivist of the Boston Athenaeum, to whom we are most grateful.

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Fig. 1. The book plate delineated by Gray himself, was kindly supplied by Thomas G. Boss, a distinguished collector.

Fig. 2. *Unio borealis*, Gray, 1882: (Ottawa River at Duck Island [below Ottawa, Ottawa Co.]; Leamy's Lake, near Hull, Quebec; *both* Canada). Lectotype MCZ 51470 from the former locality, selected by Johnson, R. I. 1956. The types of naiades (Mollusca:Unionidae) in the Museum of Comparative Zoology. *Bulletin of the Museum of Comparative Zoology* **115** (4): 108 (September). Length 81 mm, height 50 mm, width 42 mm. Female (slightly reduced).

Fig. 1

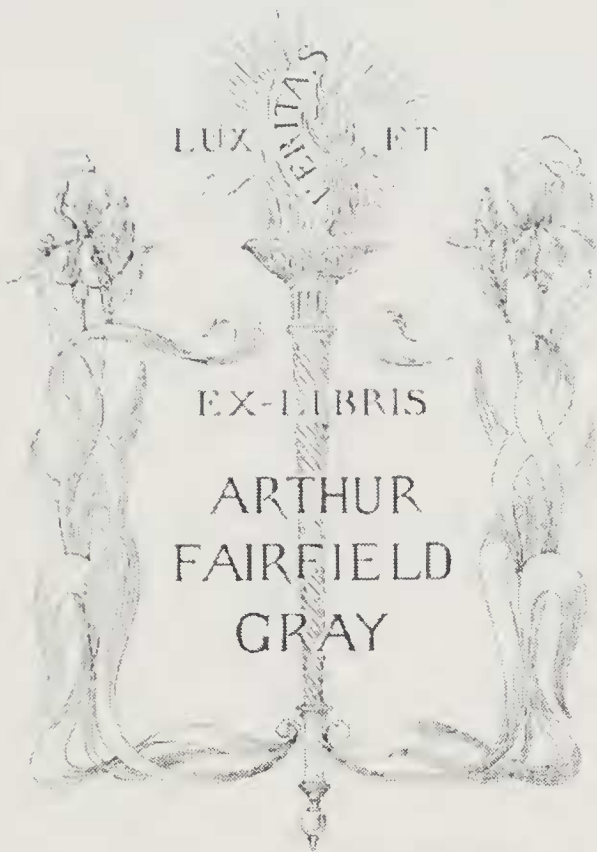


Fig. 2

